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NEWS 6 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS  
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NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available  
NEWS 9 Jun 03 New e-mail delivery for search results now available  
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NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment  
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;  
saved answer sets no longer valid  
NEWS 14 Jul 29 Enhanced polymer searching in REGISTRY  
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NEWS 16 Aug 08 CANCERLIT reload  
NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN  
NEWS 18 Aug 08 NTIS has been reloaded and enhanced  
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)  
now available on STN  
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded  
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded  
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced  
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced  
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file  
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS  
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA  
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985  
NEWS 28 Oct 21 EVENTLINE has been reloaded  
NEWS 29 Oct 24 BEILSTEIN adds new search fields  
NEWS 30 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN  
NEWS 31 Oct 25 MEDLINE SDI run of October 8, 2002  
NEWS 32 Nov 18 DKILIT has been renamed APOLLIT  
NEWS 33 Nov 25 More calculated properties added to REGISTRY  
NEWS 34 Dec 02 TIBKAT will be removed from STN  
NEWS 35 Dec 04 CSA files on STN  
  
NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01,  
CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002  
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=> file biosis medline agricola embase caba wpids japio biotechds lifesci caplus  
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FILE 'USPATFULL' ENTERED AT 16:32:12 ON 16 DEC 2002

CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 16:32:12 ON 16 DEC 2002

CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

=> e wahidullah solimabi/au

E1	1	WAHIDULLAH/AU
E2	4	WAHIDULLAH S/AU
E3	6	--> WAHIDULLAH SOLIMABI/AU
E4	3	WAHIDUR RAHMAN K M/AU
E5	3	WAHIDUZZAMAN A K M/AU
E6	1	WAHIDUZZAMAN B/AU

E7	14	WAHIDUZZAMAN M/AU
E8	1	WAHIDUZZAMAN MD/AU
E9	2	WAHIDUZZAMAN MOHAMMAD/AU
E10	2	WAHIDUZZAMAN S/AU
E11	3	WAHIDUZZAMAN S M/AU
E12	2	WAHIDUZZAMAN SYED/AU

=> s e1-e3

L1 11 (WAHIDULLAH/AU OR "WAHIDULLAH S"/AU OR "WAHIDULLAH SOLIMABI"/AU)

=> e bhosale siddharth hariba/au

E1	3	BHOSALE S V/AU
E2	1	BHOSALE SHARMRAO SHANKARRAO/AU
E3	0 -->	BHOSALE SIDDHARTH HARIBA/AU
E4	2	BHOSALE SNEHALATA H/AU
E5	1	BHOSALE SNEHLATA/AU
E6	1	BHOSALE SUNITA M/AU
E7	2	BHOSALE SURESH/AU
E8	5	BHOSALE SURESH B/AU
E9	1	BHOSALE T G/AU
E10	1	BHOSALE U/AU
E11	1	BHOSALE UJJWAL/AU
E12	3	BHOSALE V M/AU

=> e bhosale s h/au

E1	58	BHOSALE S B/AU
E2	3	BHOSALE S D/AU
E3	41 -->	BHOSALE S H/AU
E4	6	BHOSALE S N/AU
E5	1	BHOSALE S R/AU
E6	21	BHOSALE S S/AU
E7	3	BHOSALE S V/AU
E8	1	BHOSALE SHARMRAO SHANKARRAO/AU
E9	2	BHOSALE SNEHALATA H/AU
E10	1	BHOSALE SNEHLATA/AU
E11	1	BHOSALE SUNITA M/AU
E12	2	BHOSALE SURESH/AU

=> s e3

L2 41 "BHOSALE S H"/AU

=> e dsouza maria lisette de lumen/au

E1	3	DSOUZA M/AU
E2	1	DSOUZA M J/AU
E3	0 -->	DSOUZA MARIA LISETTE DE LUMEN/AU
E4	1	DSOUZA MARK/AU
E5	1	DSOUZA N B/AU
E6	2	DSOUZA N G/AU
E7	1	DSOUZA R/AU
E8	1	DSOUZA R M/AU
E9	2	DSOUZA R W/AU
E10	2	DSOUZA S/AU
E11	1	DSOUZA S A/AU
E12	1	DSOUZA S D/AU

=> s e1

L3 3 "DSOUZA M"/AU

=> e dsouza m l/au

E1	3	DSOUZA M/AU
E2	1	DSOUZA M J/AU
E3	0 -->	DSOUZA M L/AU

E4 1 DSOUZA MARK/AU  
 E5 1 DSOUZA N B/AU  
 E6 2 DSOUZA N G/AU  
 E7 1 DSOUZA R/AU  
 E8 1 DSOUZA R M/AU  
 E9 2 DSOUZA R W/AU  
 E10 2 DSOUZA S/AU  
 E11 1 DSOUZA S A/AU  
 E12 1 DSOUZA S D/AU

=> s 11-13

L4 55 (L1 OR L2 OR L3)

=> s 14 and antifungal

L5 4 L4 AND ANTIFUNGAL

=> dup rem 15

PROCESSING COMPLETED FOR L5

L6 2 DUP REM L5 (2 DUPLICATES REMOVED)

=> d bib ab 1-2

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 2002:754408 CAPLUS

DN 137:260187

TI A composition containing novel compound corniculatonin having

**antifungal** properties and a process for preparing the same

IN **Wahidullah, Solimabi**; Bhosak, Siddharth Hariba; D'Souza, Maria  
 Lisette De

PA Council of Scientific and Industrial Research, India

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077008	A1	20021003	WO 2001-IN51	20010327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

AB The invention relates to novel oleanane triterpenoid oligoglycoside (corniculatonin) of formula I. The invention also relates to a process for the isolation of the novel compd. from a mangrove plant *Aegiceras corniculatum* (Blanco) belonging to the family Myrsinaceae by solvent extn. followed by solvent fractionation and liq. chromatog. The invention also discloses the **antifungal** properties of the compd. I, and its use food preservative, or as a treatment of fungi infections. Thus 10 kg of *Aegiceras corniculatum* was extd. with methanol twice for 1 wk each, the exts. were combined concd. and fractionated using solvents of increasing polarity. Compd. I was then isolated from the aq. phase by repeated rounds of XAD-2 ion exchange chromatog. followed by Sepahdex LH20 chromatog. Compd. I was further purified by passing over silica gel.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 2 MEDLINE

DUPLICATE 1

AN 2000490776 MEDLINE  
 DN 20495738 PubMed ID: 11040863  
 TI **Antifungal** activity of some marine organisms from India, against food spoilage Aspergillus strains.  
 AU **Bhosale S H**; Jagtap T G; Naik C G  
 CS National Institute of Oceanography Dona Paula, Goa, India.  
 SO MYCOPATHOLOGIA, (1999) 147 (3) 133-8.  
 Journal code: 7505689. ISSN: 0301-486X.  
 CY Netherlands  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200011  
 ED Entered STN: 20010322  
 Last Updated on STN: 20010322  
 Entered Medline: 20001109  
 AB Crude aqueous methanol extracts obtained from 31 species of various marine organisms (including floral and faunal), were screened for their **antifungal** activity against food poisoning strains of Aspergillus. Seventeen species exhibited mild (+ = zone of inhibition 1-2 mm) to significant (+3 = zone of inhibition 3-5 mm) activity against one or the other strain under experiment. However, extracts of 12 species were active against all the three strains. Organisms like Salicornia brachiata (obligate halophyte), Sinularia leptocladus (Soft coral), Elysia grandifolia (Mollusks), Gorgonian sp. 2 and Haliclona sp. exhibited significant (inhibition zone of 3-5 mm) **antifungal** activity against one or the other strains. However, extracts of A. ilicifolius, Amphiroa sp., Poryphyra sp., Unidentified sponge, Suberites vestigium, Sinularia compressa, Sinularia sp., Sinularia maxima, Subergorgia suberosa, Echinogorgia pseudorassopo and Sabellaria cementifera were mild (inhibition zone of 1-2 mm) to moderate (inhibition zone of 2-3 mm) active against the respective strains. The growth of A. japonicus was significantly inhibited by the extracts of S. leptocladus ( $r = 0.992$ ,  $p < 0.0001$ ) and E. grandifolia ( $r = 0.989$ ,  $p < 0.0001$ ).

=> s corniculatonin

L7 1 CORNICULATONIN

=> d bib ab

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
 AN 2002:754408 CAPLUS  
 DN 137:260187  
 TI A composition containing novel compound **corniculatonin** having antifungal properties and a process for preparing the same  
 IN Wahidullah, Solimabi; Bhosak, Siddharth Hariba; D'Souza, Maria Lisette De  
 PA Council of Scientific and Industrial Research, India  
 SO PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077008	A1	20021003	WO 2001-IN51	20010327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AB The invention relates to novel oleanane triterpenoid oligoglycoside (**corniculatonin**) of formula I. The invention also relates to a process for the isolation of the novel compd. from a mangrove plant *Aegiceras corniculatum* (Blanco) belonging to the family Myrsinaceae by solvent extn. followed by solvent fractionation and liq. chromatog. The invention also discloses the antifungal properties of the compd. I, and its use food preservative, or as a treatment of fungi infections. Thus 10 kg of *Aegiceras corniculatum* was extd. with methanol twice for 1 wk each, the exts. were combined concd. and fractionated using solvents of increasing polarity. Compd. I was then isolated from the aq. phase by repeated rounds of XAD-2 ion exchange chromatog. followed by Sepahdex LH20 chromatog. Compd. I was further purified by passing over silica gel.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s oleanane triterpenoid oligoglycoside  
L8 1 OLEANANE TRITERPENOID OLIGOGLYCOSIDE

=> s oleanane triterpenoid  
L9 97 OLEANANE TRITERPENOID

=> s l9 and antifung?  
L10 3 L9 AND ANTIFUNG?

=> d bib ab 1-3

L10 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS

AN 2002:754408 CAPLUS

DN 137:260187

TI A composition containing novel compound corniculatonin having

**antifungal** properties and a process for preparing the same

IN Wahidullah, Solimabi; Bhosak, Siddharth Hariba; D'Souza, Maria Lisette De

PA Council of Scientific and Industrial Research, India

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077008	A1	20021003	WO 2001-IN51	20010327
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

AB The invention relates to novel **oleanane triterpenoid** oligoglycoside (corniculatonin) of formula I. The invention also relates to a process for the isolation of the novel compd. from a mangrove plant *Aegiceras corniculatum* (Blanco) belonging to the family Myrsinaceae by solvent extn. followed by solvent fractionation and liq. chromatog. The invention also discloses the **antifungal** properties of the compd. I, and its use food preservative, or as a treatment of fungi infections. Thus 10 kg of *Aegiceras corniculatum* was extd. with methanol twice for 1 wk each, the exts. were combined concd. and fractionated using solvents of increasing polarity. Compd. I was then isolated from the aq. phase by

repeated rounds of XAD-2 ion exchange chromatog. followed by Sepahdex LH20 chromatog. Compd. I was further purified by passing over silica gel.  
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 3 USPATFULL  
AN 2002:78876 USPATFULL  
TI Therapeutic compounds and methods of use  
IN Gribble, Gordon W., Norwich, VT, UNITED STATES  
Honda, Tadashi, Hanover, NH, UNITED STATES  
Sporn, Michael B., Tunbridge, VT, UNITED STATES  
Suh, Nanjoo, Hanover, NH, UNITED STATES  
PA Trustees of Dartmouth College (U.S. corporation)  
PI US 2002042535 A1 20020411  
AI US 2001-927081 A1 20010809 (9)  
RLI Division of Ser. No. US 1999-335003, filed on 17 Jun 1999, PENDING  
PRAI US 1998-90053P 19980619 (60)  
DT Utility  
FS APPLICATION  
LREP Steven L. Highlander, FULBRIGHT & JAWORSKI L.L.P., Suite 2400, 600 Congress Avenue, Austin, TX, 78701  
CLMN Number of Claims: 73  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Page(s)  
LN.CNT 1150  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Compounds and methods useful for chemopreventative treatment of diseases such as cancer, Alzheimer's disease, Parkinson's disease, inflammatory bowel diseases, and multiple sclerosis.

L10 ANSWER 3 OF 3 USPATFULL  
AN 2001:221178 USPATFULL  
TI Therapeutic compounds and methods of use  
IN Gribble, Gordon W., Norwich, VT, United States  
Honda, Tadashi, Hanover, NH, United States  
Sporn, Michael B., Tunbridge, VT, United States  
Suh, Nanjoo, Hanover, NH, United States  
PA Trustees of Dartmouth College, Hanover, NH, United States (U.S. corporation)  
PI US 6326507 B1 20011204  
AI US 1999-335003 19990617 (9)  
PRAI US 1998-90053P 19980619 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Higel, Floyd D.; Assistant Examiner: Sackey, Ebenezer  
LREP Fulbright & Jaworski, LLP  
CLMN Number of Claims: 13  
ECL Exemplary Claim: 1  
DRWN 14 Drawing Figure(s); 11 Drawing Page(s)  
LN.CNT 964  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Compounds and methods useful for chemopreventative treatment of diseases such as cancer, Alzheimer's disease, Parkinson's disease, inflammatory bowel diseases, and multiple sclerosis.

=> d c1m 3

L10 ANSWER 3 OF 3 USPATFULL  
CLM What is claimed is:  
1. A compound having the formula: ##STR9## wherein either A or B is a double bond, and when A is a double bond, C11 has substituted thereon .dbd.X which is an organic or inorganic moiety, and when B is a double

bond, C.sub.12 has substituted thereon .dbd.X which is an organic or inorganic moiety; R.sub.1 is an organic or inorganic moiety which may be substituted anywhere on the six-membered ring denoted by positions 1 through 10; R.sub.2 and R.sub.3 are hydrogen or organic or inorganic moieties, wherein an R.sub.2 group may be substituted anywhere on the structure represented in formula (I); and n is a number from 0 to 100.

2. The compound of claim 1 wherein R.sub.1 is a cyano group.
3. The compound of claim 1 wherein B is a double bond, X is O, R.sub.3 is --OH, and R.sub.1 is a cyano group.
4. The compound of claim 1 wherein said composition is selected from the group consisting of 3,11-dioxoolean-1,12-dien-28oic acid, 2-cyano-3,11-dioxoolean-1,12-dien-28oic acid and 2-cyano-3,12-dioxoolean-1,9-dien-28oic acid.
5. The compound of claim 1 wherein R.sub.1 is selected from the group consisting of cyano, halo, or --OR', wherein R' is H or an organic moiety.
6. The compound of claim 1 wherein R.sub.1 is an electron-withdrawing moiety.
7. The compound of claim 6 wherein R.sub.1 is at position 2.
8. The compound of claim 1 wherein said composition has the formula: ##STR10## wherein R.sub.x represents an organic or inorganic moiety.
9. The compound of claim 1 wherein R.sub.x is methyl
10. The compound of claim 9 wherein Y is hydroxyl.
11. A triterpenoid compound effective for inhibiting IFN-.gamma.-induced NO production in macrophages, said compound having an IC.sub.50 value of at least less than 0.6 .mu.M.
12. The composition of claim 11 wherein said composition has an IC.sub.50 value of at least less than 0.001 .mu.M.
13. A compound having the formula: ##STR11## wherein either A or B is a single or double bond and C11 or C12 have substituted thereon .dbd.X which is an organic or inorganic moiety; R.sub.1 is an organic or inorganic moiety which may be substituted anywhere on the six-membered ring denoted by positions 1 through 10; R.sub.2 and R.sub.3 are hydrogen or organic or inorganic moieties, wherein an R.sub.2 group may be substituted anywhere on the structure represented in the formula; and n is a number from 0 to 100.

=> d his

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FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS, LIFESCI, CAPLUS, USPATFULL, USPAT2' ENTERED AT 16:32:12 ON 16 DEC 2002

E WAHIDULLAH SOLIMABI/AU

L1

11 S E1-E3

E BHOSALE SIDDHARTH HARIBA/AU

E BHOSALE S H/AU

L2

41 S E3

E DSOUZA MARIA LISETTE DE LUMEN/AU



L3 3 S E1  
 E DSOUZA M L/AU  
 L4 55 S L1-L3  
 L5 4 S L4 AND ANTIFUNGAL  
 L6 2 DUP REM L5 (2 DUPLICATES REMOVED)  
 L7 1 S CORNICULATONIN  
 L8 1 S OLEANANE TRITERPENOID OLIGOGLYCOSIDE  
 L9 97 S OLEANANE TRITERPENOID  
 L10 3 S L9 AND ANTIFUNG?

=> s l9 and corniculatum  
 L11 1 L9 AND CORNICULATUM

=> s l9 and food (5a) fungi  
 L12 0 L9 AND FOOD (5A) FUNGI

=> s l9 and aegiceras  
 L13 1 L9 AND AEGICERAS

=> d bib

L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
 AN 2002:754408 CAPLUS  
 DN 137:260187  
 TI A composition containing novel compound corniculatonin having antifungal  
 properties and a process for preparing the same  
 IN Wahidullah, Solimabi; Bhosak, Siddharth Hariba; D'Souza, Maria Lisette De  
 PA Council of Scientific and Industrial Research, India  
 SO PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002077008	A1	20021003	WO 2001-IN51	20010327
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
RE.CNT	6	THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT			

=> s mangrove (5a) plant  
 L14 430 MANGROVE (5A) PLANT

=> s l14 and aegiceras  
 L15 34 L14 AND AEGICERAS

=> s l15 and (antimycotic or antifungal)  
 L16 2 L15 AND (ANTIMYCOTIC OR ANTIFUNGAL)

=> d bib ab 1-2

L16 ANSWER 1 OF 2 MEDLINE  
 AN 89381727 MEDLINE  
 DN 89381727 PubMed ID: 2778454

TI Toxicants from mangrove plants, V. Isolation of the piscicide,  
2-hydroxy-5-methoxy-3-undecyl-1,4 benzoquinone (5-O-methylembelin) from  
**Aegiceras** corniculatum.

AU Gomez E; de la Cruz-Giron O; de la Cruz A A; Joshi B S; Chittawong V;  
Miles D H

CS Marine Science Center, University of the Philippines, Quezon City.

SO JOURNAL OF NATURAL PRODUCTS, (1989 May-Jun) 52 (3) 649-51.  
Journal code: 7906882. ISSN: 0163-3864.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198910

ED Entered STN: 19900309  
Last Updated on STN: 19900309  
Entered Medline: 19891018

AB Extracts of the twigs and stems of the **mangrove plant**  
**Aegiceras** corniculatum demonstrated toxicity to fish (*Tilapia*  
*nilotica*). 5-O-Methylembelin was isolated and was shown to be toxic to  
fish at a concentration of 1 ppm within a period of 75 min. The structure  
of 5-O-methylembelin was determined by a study of spectroscopic properties  
and comparison with an authentic synthetic sample.

L16 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS

AN 2002:754408 CAPLUS

DN 137:260187

TI A composition containing novel compound corniculatonin having  
**antifungal** properties and a process for preparing the same

IN Wahidullah, Solimabi; Bhosak, Siddharth Hariba; D'Souza, Maria Lisette De

PA Council of Scientific and Industrial Research, India

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077008	A1	20021003	WO 2001-IN51	20010327

PI WO 2002077008 A1 20021003 WO 2001-IN51 20010327

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AB The invention relates to novel oleanane triterpenoid oligoglycoside  
(corniculatonin) of formula I. The invention also relates to a process  
for the isolation of the novel compd. from a **mangrove**  
**plant Aegiceras** corniculatum (Blanco) belonging to the  
family Myrsinaceae by solvent extn. followed by solvent fractionation and  
liq. chromatog. The invention also discloses the **antifungal**  
properties of the compd. I, and its use food preservative, or as a  
treatment of fungi infections. Thus 10 kg of **Aegiceras**  
corniculatum was extd. with methanol twice for 1 wk each, the exts. were  
combined concd. and fractionated using solvents of increasing polarity.  
Compd. I was then isolated from the aq. phase by repeated rounds of XAD-2  
ion exchange chromatog. followed by Sephadex LH20 chromatog. Compd. I was  
further purified by passing over silica gel.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l15 and inhibit?  
11 FILES SEARCHED...  
L17 2 L15 AND INHIBIT?

=> d bib ab 1-2

L17 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS  
AN 2002:754408 CAPLUS  
DN 137:260187  
TI A composition containing novel compound corniculatonin having antifungal properties and a process for preparing the same  
IN Wahidullah, Solimabi; Bhosak, Siddharth Hariba; D'Souza, Maria Lisette De  
PA Council of Scientific and Industrial Research, India  
SO PCT Int. Appl., 32 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

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WO 2002077008	A1	20021003	WO 2001-IN51	20010327

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AB The invention relates to novel oleanane triterpenoid oligoglycoside (corniculatonin) of formula I. The invention also relates to a process for the isolation of the novel compd. from a **mangrove plant Aegiceras corniculatum** (Blanco) belonging to the family Myrsinaceae by solvent extn. followed by solvent fractionation and liq. chromatog. The invention also discloses the antifungal properties of the compd. I, and its use food preservative, or as a treatment of fungi infections. Thus 10 kg of **Aegiceras corniculatum** was extd. with methanol twice for 1 wk each, the exts. were combined concd. and fractionated using solvents of increasing polarity. Compd. I was then isolated from the aq. phase by repeated rounds of XAD-2 ion exchange chromatog. followed by Sephadex LH20 chromatog. Compd. I was further purified by passing over silica gel.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS  
AN 1988:468337 CAPLUS  
DN 109:68337  
TI Effect of mercury and salinity on the growth of seedlings of three mangrove species  
AU Chen, Ronghua; Lin, Peng  
CS Dep. Biol., Xiamen Univ., Xiamen, Peop. Rep. China  
SO Xiamen Daxue Xuebao, Ziran Kexueban (1988), 27(1), 110-15  
CODEN: HMHHAF; ISSN: 0438-0479  
DT Journal  
LA Chinese  
AB Seedlings of **Aegiceras corniculatum**, **Avicennia marina**, and **Kandelia candel** were treated with various Hg-contg. dilns. of seawater. There was no effect of Hg on the time at which the bud of *A. marina* emerged from the cotyledon. However, the times at which the buds of *A. corniculatum* and *K. candel* emerged from the plumule were affected after

treatment with 10 ppm Hg. There was no damaging effect of Hg on the growth of the seedlings of the 3 species after treatment with 1 ppm Hg. There were no significant changes on the growth of K. candel seedlings between salinity of 8.75 and 17.5 .permill. dild. seawater either. The day on which the bud of A. marina emerged from the cotyledon was delayed; the bud of A. corniculatum emerged from the plumule was **inhibited** by salinity of 17.5 .permill. dild. seawater. The wt. and height of A. marina seedlings were not significantly altered by salinity of 8.75 and 17.5 .permill. dild. seawater, but that of A. corniculatum seedlings were significantly affected after the seedlings were treated with various Hg-contg. dilns. of seawater for 100 days. K. candel And A. marina could adapt to salinity better than A. corniculatum.

=> s l14 and sapogenins  
L18 0 L14 AND SAPOGENINS

=> s carniculatonin  
L19 0 CARNICULATONIN

=> s l14 and cryptococcus  
L20 1 L14 AND CRYPTOCOCCUS

=> d bib

L20 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
AN 2002:754408 CAPLUS  
DN 137:260187  
TI A composition containing novel compound corniculatonin having antifungal properties and a process for preparing the same  
IN Wahidullah, Solimabi; Bhosak, Siddharth Hariba; D'Souza, Maria Lisette De  
PA Council of Scientific and Industrial Research, India  
SO PCT Int. Appl., 32 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077008	A1	20021003	WO 2001-IN51	20010327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

=> dup rem l14  
PROCESSING COMPLETED FOR L14  
L21 271 DUP REM L14 (159 DUPLICATES REMOVED)

=> d his

(FILE 'HOME' ENTERED AT 16:31:40 ON 16 DEC 2002)

FILE 'BIOSIS, MEDLINE, AGRICOLA, EMBASE, CABA, WPIDS, JAPIO, BIOTECHDS, LIFESCI, CAPLUS, USPATFULL, USPAT2' ENTERED AT 16:32:12 ON 16 DEC 2002

L1 E WAHIDULLAH SOLIMABI/AU  
 11 S E1-E3  
 E BHOSALE SIDDHARTH HARIBA/AU  
 E BHOSALE S H/AU  
 L2 41 S E3  
 E DSOUZA MARIA LISETTE DE LUMEN/AU  
 L3 3 S E1  
 E DSOUZA M L/AU  
 L4 55 S L1-L3  
 L5 4 S L4 AND ANTIFUNGAL  
 L6 2 DUP REM L5 (2 DUPLICATES REMOVED)  
 L7 1 S CORNICULATONIN  
 L8 1 S OLEANANE TRITERPENOID OLIGOGLYCOSIDE  
 L9 97 S OLEANANE TRITERPENOID  
 L10 3 S L9 AND ANTIFUNG?  
 L11 1 S L9 AND CORNICULATUM  
 L12 0 S L9 AND FOOD (5A) FUNGI  
 L13 1 S L9 AND AEGICERAS  
 L14 430 S MANGROVE (5A) PLANT  
 L15 34 S L14 AND AEGICERAS  
 L16 2 S L15 AND (ANTIMYCOTIC OR ANTIFUNGAL)  
 L17 2 S L15 AND INHIBIT?  
 L18 0 S L14 AND SAPOGENINS  
 L19 0 S CORNICULATONIN  
 L20 1 S L14 AND CRYPTOCOCCUS  
 L21 271 DUP REM L14 (159 DUPLICATES REMOVED)

=> dup rem 115

PROCESSING COMPLETED FOR L15

L22 24 DUP REM L15 (10 DUPLICATES REMOVED)

=> d bib ab 1-24

L22 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2002 ACS

AN 2002:754408 CAPLUS

DN 137:260187

TI A composition containing novel compound corniculatonin having antifungal properties and a process for preparing the same

IN Wahidullah, Solimabi; Bhosak, Siddharth Hariba; D'Souza, Maria Lisette De

PA Council of Scientific and Industrial Research, India

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077008	A1	20021003	WO 2001-IN51	20010327
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

AB The invention relates to novel oleanane triterpenoid oligoglycoside (corniculatonin) of formula I. The invention also relates to a process for the isolation of the novel compd. from a **mangrove plant Aegiceras** corniculatum (Blanco) belonging to the family Myrsinaceae by solvent extn. followed by solvent fractionation and liq. chromatog. The invention also discloses the antifungal properties of

the compd. I, and its use food preservative, or as a treatment of fungi infections. Thus 10 kg of *Aegiceras corniculatum* was extd. with methanol twice for 1 wk each, the exts. were combined concd. and fractionated using solvents of increasing polarity. Compd. I was then isolated from the aq. phase by repeated rounds of XAD-2 ion exchange chromatog. followed by Sephadex LH20 chromatog. Compd. I was further purified by passing over silica gel.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L22 ANSWER 2 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
AN 2001:302492 BIOSIS  
DN PREV200100302492  
TI Biodiversity of manglicolous fungi on selected plants in the Godavari and Krishna deltas, East coast of India.  
AU Sarma, V. V. (1); Vittal, B. P. R.  
CS (1) Centre for Research in Fungal Diversity, Department of Ecology and Biodiversity, University of Hong Kong, Hong Kong: sarmavv@hkucc.hku.hk China  
SO Fungal Diversity, (February, 2001) Vol. 6, pp. 115-130. print.  
ISSN: 1560-2745.  
DT Article  
LA English  
SL English  
AB The examination of decaying **mangrove** materials belonging to 9 host **plant** species collected from Godavari and Krishna deltas (Andhra Pradesh), east coast of India from August, 1993 to November, 1995 resulted in the identification of 88 fungi. These include 65 Ascomycetes (74%), one Basidiomycete and 22 Mitosporic fungi (25%) (including 6 Coelomycetes and 16 Hyphomycetes). Among the 9 plants examined, maximum number of species (64) were recorded from *Rhizophora apiculata*, followed by *Avicennia officinalis* (55), *A. marina* (45), *Excoecaria agallocha* (12), *Aegiceras corniculatum*, *Ceriops decandra*, *Lumnitzera racemosa* (8 each), *Sonneratia apetala* (5), *Acanthus ilicifolius* (2). *Verruculina enalia* was recorded on all the host plants examined. *Hypoxylon* sp., *Lulworthia* sp., *Trichocladium achrasporum* were recorded on 6 out of 9 host species. *Lophiostoma mangrovei*, *Lulworthia grandispora*, *Halorosellinia oceanica* and *Hysterium* sp. were recorded in 5 out of 9 host plants. Others were recorded on any one or up to 4 host plants.
- L22 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:639449 CAPLUS  
DN 133:332086  
TI Peroxidase isozymogram in the leaves of some **mangrove plant**  
AU Cheng, Ge; Cheng, Hui-zhen; Wang, Ho-lin; Miao, Shen-yu  
CS Dep. Biology, Guangzhou Normal Univ., Canton, 510405, Peop. Rep. China  
SO Guangzhou Shiyuan Xuebao, Ziran Kexueban (2000), 21(5), 1-3, 7  
CODEN: GSXKE3; ISSN: 1000-2596  
PB Guangzhou Shiyuan Xuebao Bianjibu  
DT Journal  
LA Chinese  
AB In this paper, the Peroxidase isoenzymes in the leaves of *Kandelia candel*, *Avicennia marina*, *Bruguiera gymnorhiza*, *Aegiceras corniculatum*, *Rhizophora stylosa* were analyzed by means of ployacrylamide gel electrophoresis. After scanning we got the map of Peroxidase Isoenzymes called Isoenzymogram. It was found that the height and no. of peaks of Peroxidase Isoenzymogram were different from each other not only in different species of mangroves, but also in the same species growing at different areas.
- L22 ANSWER 4 OF 24 LIFESCI COPYRIGHT 2002 CSA  
AN 1998:74386 LIFESCI

- TI Mosquito larvicidal activity of **mangrove plant**  
extracts and synergistic activity of *Rhizophora apiculata* with pyrethrum  
against *Culex quinquefasciatus*
- AU Thangam, T.S.; Kathiresan, K.
- CS 20-44, Church View, Puthoor, Pozhikkarai - 629 501, Kanyakumari Dist.,  
Tamil Nadu, India
- SO INT. J. PHARM., (19980100) vol. 35, no. 1, pp. 69-71.  
ISSN: 0925-1618.
- DT Journal
- FS W2; A; Z
- LA English
- SL English
- AB **Plant** samples were collected from 15 **mangrove** species,  
*Acanthus ilicifolius*, **Aegiceras** corniculatum, *Avicennia marina*,  
*A. officinalis*, *Bruguiera cylindrica*, *Ceriops decandra*, *Excoecaria*  
*agallocha*, *Rhizophora apiculata*, *R. Lamarckii*, *R. mucronata*, *Salicornia*  
*brachiata*, *Sesuvium portulacastrum*, *Sonneratia apetala*, *Suaeda maritima*,  
*S. monoica* and *Xylocarpus granatum*. The 22 samples were extracted in  
acetone and petroleum ether separately, and the extracts were tested for  
their activity against the larvae of mosquito, *Culex quinquefasciatus*.  
Petroleum ether extract of *R. apiculata* was found most effective with LC  
sub(50) of 25.7 mg /l. The extract was studied further with pyrethrum for  
its synergistic larvicidal activity. The extract exhibited synergism and  
the synergistic factor was 0.81 at 5 mg/l.
- L22 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2002 ACS
- AN 1998:195486 CAPLUS
- DN 128:255204
- TI Cold-resistance ability of two mangrove species *Kandelia candel* and  
**Aegiceras** corniculatum during their overwintering period
- AU Yang, Shengchang; Lin, Peng
- CS Xiamen Univ., Xiamen, 361005, Peop. Rep. China
- SO Yingyong Shengtai Xuebao (1997), 8(6), 561-565  
CODEN: YSXUER; ISSN: 1001-9332
- PB Yingyong Shengtai Xuebao Bianji Weiyuanhui
- DT Journal
- LA Chinese
- AB In this paper, the leaf cold-resistance ability of two mangrove species  
*Kandelia candel* and **Aegiceras** corniculatum growing on  
Jiulongjiang Estuary of Fujian Province was measured by cond. method, and  
the relationship of this ability with the contents of leaf water,  
chlorophyll and sol. protein and the activity of peroxidase during  
overwintering period was studied. The result show that the  
cold-resistance ability of these two mangrove species from Sept. 1988 to  
Apr. 1989 is increased with decreasing of air temp., and reached their  
max. in Jan. and Dec., resp. Their half lethal temp. is resp. -9.3 and  
-9.0.degree.. After winter, the cold resistance ability is decreased  
dramatically with the rise of air temp. The increase of the  
cold-resistance ability is related with the increase of bound-water or the  
decrease of free-water content in leaf. Both the sol. protein content and  
the peroxidase activity have a similar variation trend to the  
cold-resistance ability. The ratio of leaf bound-water to free-water and  
the ratio of leaf chlorophyll to chlorophyll b may reflect the  
cold-resistance ability of these two mangrove species: the higher the both  
are, the stronger the cold-resistance ability is.
- L22 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2002 ACS
- AN 1997:763682 CAPLUS
- DN 128:32449
- TI Nutrient dynamics of a Futian Mangrove Forest in Shenzhen, South China
- AU Li, M. S.
- CS The Swire Institute of Marine Science, University of Hong Kong, Shek O,  
Hong Kong

SO Estuarine, Coastal and Shelf Science (1997), 45(4), 463-472  
 CODEN: ECSSD3; ISSN: 0272-7714  
 PB Academic  
 DT Journal  
 LA English  
 AB An ecol. study was carried out to det. nutrient levels of sediments, plant tissues and nutrient dynamics in an **Aegiceras** corniculatum-Kandelia candel dominated forest in Futian Mangrove Nature Reserve, Shenzhen, the People's Republic of China. The av. tree height of the mangrove is 4.5 m with no vertical stratification. Allometric methodol. was used to measure the biomass, and yield a figure of 108.26 t ha-1. The annual growth of the forest (1992) 15.92 t ha-1 and the litterfall rate amounted to 11.49 t ha-1. Nutrient stocks of N, P and K in this mangrove were 616.05, 128.63 and 801.17 kg ha-1, with an annual accumulation of 91.34, 14.74 and 130.60 kg ha-1, and with an annual return of 88.30, 12.85 and 29.32 kg ha-1 in the form of litter, resp. The annual uptake (accumulation + return) for N, P and K was 179.64, 27.59 and 159.92 kg ha-1, resp., in 1992. It seems that this mangrove community is close to equil. in terms of import and export of N and P, but has an obvious conservation of K. Enrichment ratios of N, P and K were at 1.10, 0.81 and 0.76, resp., lower than their counterparts in terrestrial forests. The turnover rate (the stock amt. in the community/annual return) of N, P and K was estd. at 7, 10 and 27 yr, resp. Flow coeffs. and translocation rates, which reveal the dynamic processes of nutrients between mangrove plants and sediments, are also discussed.

L22 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2002 ACS  
 AN 1997:537046 CAPLUS  
 DN 127:202953  
 TI Photosynthetic pigments in tropical mangroves. Impacts of seasonal flux of UV-B radiation and other environmental attributes  
 AU Moorthy, P.; Kathiresan, K.  
 CS Center Advanced Study Marine Biology, Annamalai University, Parangipettai, 608502, India  
 SO Botanica Marina (1997), 40(4), 341-349  
 CODEN: BOTNA7; ISSN: 0006-8055  
 PB de Gruyter  
 DT Journal  
 LA English  
 AB Pigments were quantified in 11 plant species for a 1-yr period from Apr. 1993 to Mar. 1994 in a S.E. Indian tropical mangrove ecosystem. Measurements were made of solar radiation and UV-B radiation, atm. ozone, atm. temp., water temp., salinity, and pH. Solar radiation and UV-B radiations were high in Apr. with resp. values of 1.87 cal cm-2 min-1; 0.319 W m-2 and atm. ozone levels were high in July (0.26 atm cm). The temps. (air, water) and water pH were highest in August with resp. values of 39, 33.degree., 8.0, while salinity was highest during Apr. and July (3.3%). Total chlorophylls, those in the light harvesting complex and carotenoids were highest in **Aegiceras** corniculatum with resp. values of 1.85, 0.92 mg g-1, and 0.44 .mu.mol g-1 and min. in Sesuvium portulacastrum (0.544, 0.187 mg g-1, and 0.101 .mu.mol g-1). The influences of environmental parameters on the pigments were analyzed statistically and physiol. groupings of mangrove species were deduced.

L22 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2002 ACS  
 AN 1997:313580 CAPLUS  
 DN 126:341110  
 TI Above- and below-ground biomasses of two species of mangrove on the Hawkesbury River estuary, New South Wales  
 AU Saintilan, Neil  
 CS Australian Catholic University, Castle Hill, NSW 2154, Australia  
 SO Marine and Freshwater Research (1997), 48(2), 147-152  
 CODEN: MFREFX; ISSN: 1323-1650



- PB CSIRO  
DT Journal  
LA English  
AB Above- and below-ground biomasses of two species of mangrove, *Avicennia marina* and *Aegiceras corniculatum*, were estd. in a range of intertidal environments along the Hawkesbury River. Ests. of biomass of *Avicennia* communities in freshly accreted brackish substrata were in the order of 40 kg m<sup>-2</sup>, the highest figure ever recorded for temperate mangrove communities. The above-ground biomass communities of each species declined with increasing substratum salinity, whereas root/shoot ratios increased with increasing substratum salinity.
- L22 ANSWER 9 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
AN 1998:53826 BIOSIS  
DN PREV199800053826  
TI Response of *Aegiceras corniculatum* to synthetic sewage under simulated tidal conditions.  
AU Wong, Yuk-Shan; Tam, Nora F. Y. (1); Chen, Gui-Zhu; Ma, Hua  
CS (1) Dep. Biology Chemistry, City Univ. Hong Kong, Hong Kong Hong Kong  
SO Hydrobiologia, (Sept. 5, 1997) Vol. 352, No. 0, pp. 89-96.  
ISSN: 0018-8158.  
DT Article  
LA English  
AB Young plants of *Aegiceras corniculatum*, a dominant mangrove species, were collected from Futian Mangrove Swamp in Shenzhen, The People's Republic of China, and grown in simulated tide tanks containing mangrove sediments. After acclimatisation in the greenhouse for 6 months, the plants were irrigated with either synthetic sewage of various strengths (NW, FW and TW) or artificial seawater (as control). NW had the characteristics and strength equivalent to municipal wastewater, while FW and TW contained 5 and 10 times the nutrient and heavy metal concentrations of the NW, respectively. Results showed that the young plants of *A. corniculatum* were able to tolerate the wastewater (TW) with highest concentration of nutrients and heavy metals after one year treatment. The growth of TW treated plants, measured in terms of stem height, basal diameter and biomass, was comparable to that found in the control. The plants treated with NW and FW had significantly greater growth than the control, indicating that the nutrients contained in sewage are beneficial to mangrove plants. Physiological parameters such as chlorophyll content, the ratio of chlorophyll a and b, proline concentration and root activity did not show any significant changes among plants treated with wastewater of various strengths and the control, suggesting that sewage addition did not cause any apparent physiological impact on growth of *A. corniculatum*. Nevertheless, the plants which received sewage with highest levels of heavy metals (TW treatment) appeared to have lower content of free water but higher amount of bound water than FW, NW and the control. Higher electric conductance was also found in plants treated with TW.
- L22 ANSWER 10 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
1  
AN 1997:413091 BIOSIS  
DN PREV199799705134  
TI Mosquito larvicidal activity of mangrove plant extracts and synergistic activity of *Rhizophora apiculata* with pyrethrum against *Culex quinquefasciatus*.  
AU Thangam, T. Subramonia (1); Kathiresan, K.  
CS (1) 20-44 Church View, Puthoor, Pozhikkarai-629 501, Kanyakumari Dist., Tamil Nadu India  
SO International Journal of Pharmacognosy, (1997) Vol. 35, No. 1, pp. 69-71.  
ISSN: 0925-1618.  
DT Article  
LA English

- AB **Plant** samples were collected from 15 **mangrove** species, *Acanthus ilicifolius*, *Aegiceras corniculatum*, *Avicennia marina*. *A. officinalis*, *Bruguiera cylindrica*, *Ceriops decandra*, *Excoecaria agallocha*, *Rhizophora apiculata*, *R. Lamarckii*, *R. mucronata*, *Salicornia brachiata*, *Sesuvium portulacastrum*, *Sonneratia apetala*, *Suaeda maritima*, *S. monoica* and *Xylocarpus granatum*. The 22 samples were extracted in acetone and petroleum ether separately, and the extracts were tested for their activity against the larvae of mosquito, *Culex quinquefasciatus*. Petroleum ether extract of *R. apiculata* was found most effective with LC-50 of 25.7 mg/l. The extract was studied further with pyrethrum for its synergistic larvicidal activity. The extract exhibited synergism and the synergistic factor was 0.81 at 5 mg/l.
- L22 ANSWER 11 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 AN 1998:49637 BIOSIS  
 DN PREV199800049637  
 TI Wood structure of *Aegiceras corniculatum* and its ecological adaptations to salinities.  
 AU Sun, Qiang; Lin, Peng  
 CS Dep. Biology, Xiamen Univ., Xiamen China  
 SO Hydrobiologia, (Sept. 5, 1997) Vol. 352, No. 0, pp. 61-66.  
 ISSN: 0018-8158.  
 DT Article  
 LA English  
 AB We describe the wood structure of *Aegiceras corniculatum* and its differences under various soil salinities. This species had diffuse-porous wood with poorly defined growth rings. Vessels which had single perforations occurred abundantly and in multiples and were storeyed. Intervascular pits between contiguous vessels were alternate bordered ones while half-bordered pit-pairs existed between both vessel-ray and vessel-parenchyma. Homogenous xylem rays were multiseriate and uniseriate. Fiber-tracheids with bordered pits often had thinner walls. Xylem parenchyma cells were scant and distributed diffusely and paratracheally. Differences in the structural and quantitative characters of vessels, xylem rays and fiber-tracheids under diverse soil salinities are described.
- L22 ANSWER 12 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 2  
 AN 1998:53824 BIOSIS  
 DN PREV199800053824  
 TI Mangrove wetlands as wastewater treatment facility: A field trial.  
 AU Wong, Y. S.; Tam, N. F. Y. (1); Lan, C. Y.  
 CS (1) Dep. Biology Chemistry, City Univ. Hong Kong, Kowloon Hong Kong  
 SO Hydrobiologia, (Sept. 5, 1997) Vol. 352, No. 0, pp. 49-59.  
 ISSN: 0018-8158.  
 DT Article  
 LA English  
 AB Field work has been conducted in a 300-hectare natural mangrove intertidal wetlands in Shenzhen, a newly developed city in southern China, to study the feasibility of using mangrove wetlands as a sewage treatment facility. The present paper reports the results obtained in the recent year, between December 1994 and December 1995. Two parallel elongated sites (Sites A & B, each 180 m X 10 m) extending from land to sea were chosen for study. Since September 1991, Site A has received settled municipal sewage three times a week during the low ebb tide period when sediments at landward regions were dry. The hydraulic loading was 20 m<sup>3</sup> per discharge and wastewater was soaked into the sediments within 50 m of the discharge points before the next incoming tide. Site B served as a control. Over the past months in 1994 and 1995, surface sediments and plant leaves were collected at identified locations in two sites at every six month intervals. The impact of sewage on **mangrove plant** growth was assessed by monitoring plant height, diameter and number of

trees using the fixed plot technique. The plant density, stem diameter and tree height of two dominant mangrove species, *Kandelia candel* and *Aegiceras corniculatum*, found in Site A were comparable with those of Site B. No significant difference was detected between two sites in terms of plant growth and death rates. These results indicate that sewage discharge over a period of about two years did not exhibit any apparent effect on plant growth. The nutrient and organic matter concentrations of surface sediments in Site A were also not significantly different from those found in Site B, except at the very landward regions (2 to 40 m away from landwards). The nutrient concentrations of sediments collected in sampling locations near the discharge points of Site A were however significantly higher than that of the control. In both sites, the organic C, total N and P,  $\text{NH}_4\text{-N}$  and  $\text{NO}_3\text{-N}$  concentrations in the surface sediments exhibited a descending trend from landwards to seaward regions, with notably higher values found in the landward locations. Seasonal variation in  $\text{NH}_4\text{-N}$  content was obvious, and more ammonium nitrogen was recorded in July than in December. Leaf samples of the two dominant plant species collected from Site A had similar total N and organic C concentrations as those from Site B. These findings suggest that mangrove intertidal wetlands are of great potential for natural wastewater treatment, and are unlikely to produce any harmful effect on the higher plant communities.

L22 ANSWER 13 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
3

AN 1998:45597 BIOSIS

DN PREV199800045597

TI Mapping and characterization of mangrove plant communities in Hong Kong.

AU Tam, Nora F. Y. (1); Wong, Yuk-Shan; Lu, C. Y.; Berry, R.

CS (1) Dep. Biology Chemistry, City Univ. Hong Kong, Hong Kong Hong Kong

SO Hydrobiologia, (Sept. 5, 1997) Vol. 352, No. 0, pp. 25-37.  
ISSN: 0018-8158.

DT Article

LA English

AB Ecological surveys were carried out to investigate the distribution and characterization of remaining mangrove stands in Hong Kong. The field studies indicate that 43 mangrove stands, excluding Mai Po Nature Reserve, still remained along the coastline of Hong Kong despite tremendous reclamation and development which occurred in the past 40 years. Most mangrove stands were found in Deep Bay (western part) and Sai Kung District (eastern coasts). The total areas occupied by these mangrove stands were 178 ha, varying from a very small stand (with 1-2 mangrove shrubs) to fairly extensive mangroves in Deep Bay (> 10 ha). It appeared that mangrove stands located in Deep Bay area were larger than those in the eastern coasts. Twenty plant species were identified from these stands, with 13 being exclusive or associate mangrove species. The major constituent species were *Kandelia candel*, *Aegiceras corniculatum*, *Excoecaria agallocha* and *Avicennia marina*. Rare species such as *Heritiera littoralis* were only found in a few mangrove stands. Out of the 43 remaining mangrove stands, 23 were more worthwhile for conservation and their plant community structures were further investigated by transect and quadrat analyses. The importance values (sum of relative abundance, frequency and dominance) show that *K. candel* was the most dominant species. Species richness and Simpson's indices together with tree height, tree density and canopy area fluctuated significantly between mangrove stands. These values were used to prioritize the conservation potential of the remaining mangrove stands in Hong Kong.

L22 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2002 ACS

AN 1995:930865 CAPLUS

DN 123:335337

TI Effect of salinity on membrane protection system for various organs of *Aegiceras corniculatum* seedling

- AU Zheng, Hailei; Lin, Peng  
 CS Dept. of Biol., Xiamen Univ., Xiamen, Peop. Rep. China  
 SO Xiamen Daxue Xuebao, Ziran Kexueban (1995), 34(4), 629-33  
 CODEN: HMHHAF; ISSN: 0438-0479  
 PB Xiamen Daxue  
 DT Journal  
 LA Chinese  
 AB The variations of protein content, activities of superoxide dismutase (SOD), catalase (CAT) and peroxidase (POX) and the membrane peroxidn. intensity in various organs of **Aegiceras** corniculatum seedling with the changes of salinity were investigated. The relationship between peroxidn. and membrane protection enzyme was discussed for the **mangrove plant** seedling at different soil salinities. Thus, the content of protein in leaf and root declined with the increasing of salinity, while the protein content in stem increased, and the activity of SOD reduced remarkably, finally the activities of CAT and POX had a little redn. or remain stable.
- L22 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2002 ACS  
 AN 1995:438332 CAPLUS  
 DN 122:222154  
 TI Effect of wastewater discharge on nutrient contamination of mangrove soils and plants  
 AU Wong, Y. S.; Lan, C. Y.; Chen, G. Z.; Li, S. H.; Chen, X. R.; Liu, Z. P.; Tam, N. F. Y.  
 CS Research Centre/Biology Department, Hong Kong University of Science and Technology, Kowloon, Hong Kong  
 SO Hydrobiologia (1995), 295(1-3), 243-54  
 CODEN: HYDRB8; ISSN: 0018-8158  
 DT Journal  
 LA English  
 AB The ecol. impact of sewage discharges to a mangrove wetland in Futian National Nature Reserve, China, was assessed by comparing the plant community, plant growth and nutrient status of soils and vegetation of a site treated with settled municipal wastewater (Site A) with those of a control adjacent site (Site B) which did not receive sewage. During the 1-yr study, the total and available N and P, and org. C concns. of mangrove soils in Site A did not significantly differ from those of Site B. In both sites, the soil org. C, total N, NH<sub>4</sub><sup>+</sup>-N and total P content exhibited a descending trend from landward to seaward regions, with the lowest measurements obtained from the most foreshore location. Seasonal variation in N content of soil samples was more obvious than any difference between wastewater treated and the control sites. The soil N content was lower in spring and summer. This was attributed to the higher temp. in these seasons which facilitated degrdn. of org. matter and absorption of N by the plants for growth. No significant difference in plant community structure, plant growth (in terms of tree height and diam.) and biomass was found between Sites A and B. Leaf samples of the 2 dominant plant species, *Kandelia candel* and **Aegiceras** corniculatum, collected from Site A had comparable content of org. C, N, P, and K to those of Site B. These results indicated that the discharge of a total vol. of 2600 m<sup>3</sup> municipal wastewater to an area of 1800 m<sup>2</sup> mangrove plants over the period of 1 yr did not produce any apparent impact on growth of the plants. The soils and plant leaves of Site A were not contaminated, in terms of nutrient content, by the discharged sewage.
- L22 ANSWER 16 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 4  
 AN 1995:169789 BIOSIS  
 DN PREV199598184089  
 TI Nutrients and heavy metal contamination of plants and sediments in Futian mangrove forest.  
 AU Tam, N. F. Y.; Li, S. H.; Lan, C. Y.; Chen, G. Z.; Li, M. S.; Wong, Y. S.

(1)

- CS (1) Res. Centre/Biol Dep., Hong Kong Univ. Sci. Technol., Clear Water Bay, Kowloon Hong Kong
- SO Hydrobiologia, (1995) Vol. 295, No. 1-3, pp. 149-158.  
ISSN: 0018-8158.
- DT Article
- LA English
- AB An ecological survey was carried out to determine the levels of nutrients and heavy metals in the sediments and leaf tissues of two dominant **mangrove plant** species, *Kandelia candel* and *Aegiceras corniculatum*, in Futian mangrove forest, Shenzhen, the People's Republic of China. The spatial and seasonal variations of these elements were also investigated. The results show that there was no major difference between two sampling sites 150 m apart. In both sites, the sediment concentrations of total and NH<sub>4</sub><sup>+</sup>-N, total and extractable P, total and extractable K, total organic carbon were consistently higher in the landward locations and decreased gradually towards the sea. The sediment samples collected at the seaward edge of the **mangrove plant** community had the lowest levels of nutrient and organic matter. The vertical variations (from the land to the sea) of sediment heavy metals were less obvious and no particular trend could be identified. Extremely high contents of Cu, Cd, Pb, Cr and Zn were found at certain locations, suggesting the occurrence of some local contamination. The mean total metal concentrations in sediments decreased in the order Mn > Zn > Cu > Cr = Pb > Cd for the sample locations. Most of the heavy metals were not in a bioavailable form as the concentrations of extractable metals were relatively low (lt 1% of total metals). Pb, Cr and Cd were not detected in leaf samples. Leaf C, N, P and K contents were similar between the two species and no significant difference was found among locations, although *A. corniculatum* seemed to have lower Mn concentrations than *K. candel*. With reference to temporal variations, no significant difference in sediment concentrations of some nutrients and metals was found between the spring and autumn seasons.
- L22 ANSWER 17 OF 24 CABA COPYRIGHT 2002 CABI
- AN 95:138193 CABA
- DN 950504122
- TI Smoke repellency and killing effect of mangrove plants against the mosquito *Aedes aegypti* (Linnaeus)
- AU Thangam, T. S.; Srinivasan, K.; Kathiresan, K.
- CS Centre of Advanced Study in Marine Biology, Annamalai University, Parangipettai 608 502, Tamil Nadu, India.
- SO Tropical Biomedicine, (1993) Vol. 10, No. 2, pp. 125-128. 6 ref.  
ISSN: 0127-5720
- DT Journal
- LA English
- AB Ten mosquito coil formulations were prepared using each of 10 Indian **mangrove plant** samples (leaves of *Acanthus ilicifolius*, *Aegiceras corniculatum*, *Avicennia marina*, *A. officinalis*, *Bruguiera cylindrica*, *Ceriops decandra*, *Excoecaria agallocha*, *Lumnitzera racemosa*, *Rhizophora lamarckii* and stilt roots of *R. apiculata*). The smoke from the coils was tested against biting *Aedes aegypti* females. Among the samples tested, smoke from *Acanthus ilicifolius* leaves was found to be most effective against biting activity.
- L22 ANSWER 18 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
- AN 1991:134787 BIOSIS
- DN BA91:71327
- TI OBSERVATIONS ON THE FLORAL BIOLOGY OF CERTAIN MANGROVES.
- AU ALURI R J
- CS DEP. BIOL., UNIV. AKRON, AKRON, OH 44325.
- SO PROC INDIAN NATL SCI ACAD PART B BIOL SCI, (1990) 56 (4), 367-374.  
CODEN: PIBSBB. ISSN: 0073-6600.

FS BA; OLD  
LA English  
AB The present study examined the floral biology in relation to pollinators in five **mangrove plant** species of the Godavary estuaries in Southern India. Pollen vectors were a necessity to *Caesalpinia nuga* and *Acanthus ilicifolius* flowers for their mating system. In *Aegiceras corniculatus* and *Lumnitzera racemosa* flowers were pollinated autogamously and their pollen and nectar served as food resource for some insects. *Avicennia officinalis* reproduced through outcrossing while maintaining autogamy. Carpenter bees were the main pollinators for *C. nuga*, sunbirds for *A. ilicifolius*, flies for *A. officinalis*. The floral architecture was also designed to operate the pollination mechanism in each of these species. Retention of calyx in all but *C. nuga* was considered to be a protective role for the successful development of fertilised ovules into fruits.

L22 ANSWER 19 OF 24 CABA COPYRIGHT 2002 CABI  
AN 91:102987 CABA  
DN 910653460  
TI Studies on the structure of **plant** organs and ecological adaptation of **mangrove** in China (II)  
AU Huang, G. L.; Huang, Q. C.  
CS Department of Biology, Zhongshan University, Guangzhou, China.  
SO Acta Scientiarum Naturalium Universitatis Sunyatseni, (1990) Vol. 29, No. 2, pp. 94-101. 9 ref.  
ISSN: 0529-6579

DT Journal  
LA Chinese  
AB The results are presented of a study of the root anatomy of 16 species of mangroves found along S. China coasts (Guangdong and Hainan island), viz. *Acanthus ebracteatus*, *A. ilicifolius*, *Lumnitzera racemosa*, *Excoecaria agallocha*, *Xylocarpus granatum*, *Aegiceras corniculatum*, *Bruguiera gymnorhiza*, *B. sexangula*, *Kandelia candel*, *Ceriops tagal*, *Rhizophora apiculata*, *R. stylosa*, *Scyphiphora hydrophyllacea*, *Sonneratia hainanensis*, *Heritiera littoralis* and *Avicennia marina*. The results show that there is convergent adaptation of mangrove roots in the 10 families represented, and that the structure of the aerial root (pneumatophore) resembles that of the stem. Three photographic plates showing some of the cell structures and root forms are included.

L22 ANSWER 20 OF 24 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 5  
AN 1989:388403 BIOSIS  
DN BA88:68993  
TI TOXICANTS FROM MANGROVE PLANTS V. ISOLATION OF THE PISCICIDE 2 HYDROXY-5-METHOXY-3-UNDECYL-1 4-BENZOQUINONE 5-O METHYLEMBELIN FROM **AEGICERAS-CORNICULATUM**.  
AU GOMEZ E; DE LA CRUZ-GIRON O; DE LA CRUZ A A; JOSHI B S; CHITTAWONG V; MILES D H  
CS MARINE SCI. CENT., UNIV. PHILIPPINES, QUEZON CITY, PHILIPPINES.  
SO J NAT PROD (LLOYDIA), (1989) 52 (3), 649-651.  
CODEN: JNPRDF. ISSN: 0163-3864.

FS BA; OLD  
LA English  
AB Extracts of the twigs and stems of the **mangrove plant** *Aegiceras corniculatum* demonstrated toxicity to fish (*Tilapia nilotica*). 5-O-Methylembelin was isolated and was shown to be toxic to fish at a concentration of 1 ppm within a period of 75 min. The structure of 5-O-methylembelin was determined by a study of spectroscopic properties and comparison with an authentic synthetic sample.

L22 ANSWER 21 OF 24 CABA COPYRIGHT 2002 CABI  
AN 89:29099 CABA

DN 890593780  
TI Toxic effect of **mangrove plant** extracts on mosquito  
larvae *Anopheles stephensi* L  
AU Thangam, T. S.; Kathiresan, K.  
CS Dep. Marine Biol., Annamalai Univ., Parangipettai-608 502, India.  
SO Current Science, India, (1988) Vol. 57, No. 16, pp. 914-915. 5 ref.  
DT Journal  
LA English  
AB Acetone extracts of various plants from mangrove forests, namely  
*Rhizophora apiculata* (from stilt roots), *R. mucronata* (from stilt roots  
and leaves), *Avicennia marina*, *Suaeda maritima*, *S. monoica*, *Excoecaria*  
*agallocha* and ***Aegiceras*** *corniculatum*, were tested for their  
toxicity to 4th-instar larvae of *Anopheles stephensi* over 24 h. The LD50s  
for mosquito larvae of each were, respectively, 17, 0, 52, 80, 0, 0, 0 and  
0 p.p.m.

L22 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2002 ACS  
AN 1988:468337 CAPLUS  
DN 109:68337  
TI Effect of mercury and salinity on the growth of seedlings of three  
mangrove species  
AU Chen, Ronghua; Lin, Peng  
CS Dep. Biol., Xiamen Univ., Xiamen, Peop. Rep. China  
SO Xiamen Daxue Xuebao, Ziran Kexueban (1988), 27(1), 110-15  
CODEN: HMHHAF; ISSN: 0438-0479  
DT Journal  
LA Chinese  
AB Seedlings of ***Aegiceras*** *corniculatum*, *Avicennia marina*, and  
*Kandelia candel* were treated with various Hg-contg. dilns. of seawater.  
There was no effect of Hg on the time at which the bud of *A. marina*  
emerged from the cotyledon. However, the times at which the buds of *A.*  
*corniculatum* and *K. candel* emerged from the plumule were affected after  
treatment with 10 ppm Hg. There was no damaging effect of Hg on the  
growth of the seedlings of the 3 species after treatment with 1 ppm Hg.  
There were no significant changes on the growth of *K. candel* seedlings  
between salinity of 8.75 and 17.5 .permill. dild. seawater either. The  
day on which the bud of *A. marina* emerged from the cotyledon was delayed;  
the bud of *A. corniculatum* emerged from the plumule was inhibited by  
salinity of 17.5 .permill. dild. seawater. The wt. and height of *A.*  
*marina* seedlings were not significantly altered by salinity of 8.75 and  
17.5 .permill. dild. seawater, but that of *A. corniculatum* seedlings were  
significantly affected after the seedlings were treated with various  
Hg-contg. dilns. of seawater for 100 days. *K. candel* And *A. marina* could  
adapt to salinity better than *A. corniculatum*.

L22 ANSWER 23 OF 24 AGRICOLA  
AN 84:65984 AGRICOLA  
DN IND84046809  
TI Structural features of the salt gland of ***Aegiceras*** [River  
**mangrove plant**].  
AU Field, C.D.; Hinwood, B.G.; Stevenson, I.  
AV DNAL (QK1.T37)  
SO Tasks for vegetation science., 1984 Vol. 9 p. 37-42 ill  
Publisher: The Hague : W. Junk Publishers.  
NTE Includes references.  
DT Article  
FS Non-U.S. Imprint other than FAO  
LA English

L22 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2002 ACS  
AN 1976:417158 CAPLUS  
DN 85:17158  
TI Ultrastructural localization of ions. III. Distribution of chloride in

mesophyll cells of mangrove (**Aegiceras** corniculatum Blanco)

AU Van Steveninck, R. F. M.; Armstrong, W. D.; Peters, P. D.; Hall, T. A.

CS Dep. Bot., Univ. Queensland, St. Lucia, Australia

SO Australian Journal of Plant Physiology (1976), 3(3), 367-76

CODEN: AJPPCH; ISSN: 0310-7841

DT Journal

LA English

AB Ultrastructural localization of Cl<sup>-</sup> via a Ag<sup>+</sup> pptn. technique combined with x-ray energy spectroscopy (EMMA-4 electron microscope plus KEVEX energy dispersive analyzer) showed the presence of 2 types of vacuoles in mesophyll cells of mangrove (A. corniculatum). Type A vacuoles contained large amts. of osmiophilic org. solute and little or no Cl<sup>-</sup>, whereas type B vacuoles were free of osmiophilic org. solute and contained significant quantities of Cl<sup>-</sup>. X-ray spectroscopy of electron-opaque deposits in chloroplasts showed the presence of AgCl deposits and deposits of Ag in approx. equal proportions. Fine granular deposits in plastoglobuli also consisted of Ag. Deposits in the cytoplasmic phase and in the plasmodesmata, however, always consisted of AgCl. The significance of the 2 types of vacuoles is discussed in relation to the symplastic or apoplastic transport of Cl<sup>-</sup> from conducting tissue to the salt glands.



# WEST Search History

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L18	L14 and fungicide	15	L18
L17	L14 and inhibition	46	L17
L16	L14 and myrsinaceae	1	L16
L15	L14 and triterpenoid	2	L15
L14	L13 and (fungus or mould)	185	L14
L13	blanco	1888	L13
L12	corniculatum	3	L12
L11	oleanane triterpenoid oligoglycoside	1	L11
L10	l8 and antifungal	1	L10
L9	aegiceras corniculatum	1	L9
L8	mangrove plant	11	L8
L7	corniculatonin	1	L7
L6	l4 and antifungal	0	L6
L5	bhosale.in.	0	L5
L4	dsouza.in.	232	L4
L3	dsouza-marie-lisette.in.	0	L3
L2	bhosale-siddharth-hariba.in.	0	L2
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PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030054052 A1

TITLE: Triterpene compositions and methods for use thereof

PUBLICATION-DATE: March 20, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Haridas, Valsala	Houston	TX	US	
Guttermann, Jordan U.	Houston	TX	US	

US-CL-CURRENT: 424/757; 424/725

Full	Title	Citation	Print	Review	Classification	Date	Reference	Sequences	Attachments	Citations	Draw	Draw Desc	Image
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L8: Entry 2 of 5

File: PGPB

Feb 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030039705

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030039705 A1

TITLE: Triterpene compositions and methods for use thereof

PUBLICATION-DATE: February 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Arntzen, Charles J.	Ithaca	NY	US	
Guttermann, Jordan U.	Houston	TX	US	

US-CL-CURRENT: 424/725

Full	Title	Citation	Print	Review	Classification	Date	Reference	Sequences	Attachments
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Draw	Draw Desc	Image
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☐ 3. Document ID: US 20030031738 A1

L8: Entry 3 of 5

File: PGPB

Feb 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030031738

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030031738 A1

TITLE: Triterpene compositions and methods for use thereof

PUBLICATION-DATE: February 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Haridas, Valsala	Houston	TX	US	
Guttermann, Jordan U.	Houston	TX	US	

US-CL-CURRENT: 424/757; 424/725

Full Title Citation Front Review Classification Date Reference Sequences Attachments

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☐ 4. Document ID: US 6444233 B1

L8: Entry 4 of 5

File: USPT

Sep 3, 2002

US-PAT-NO: 6444233

DOCUMENT-IDENTIFIER: US 6444233 B1

TITLE: Triterpene compositions and methods for use thereof

DATE-ISSUED: September 3, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Arntzen; Charles J.	Ithaca	NY		
Blake; Mary E.	Tucson	AZ		
Guttermann; Jordan U.	Houston	TX		
Hoffmann; Joseph J.	Tucson	AZ		
Jayatilake; Gamin S.	Broomfield	CO		
Bailey; David T.	Boulder	CO		

US-CL-CURRENT: 424/725; 514/183

Full Title Citation Front Review Classification Date Reference Sequences Attachments

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☐ 5. Document ID: US 6419963 B1

L8: Entry 5 of 5

File: USPT

Jul 16, 2002

US-PAT-NO: 6419963

DOCUMENT-IDENTIFIER: US 6419963 B1

TITLE: Composition and method for the treatment of diaper rash using natural products

DATE-ISSUED: July 16, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Niazi; Sarfaraz K	Deerfield	IL	60015	

US-CL-CURRENT: 424/757; 424/539, 424/725, 514/26

Full Title Citation Front Review Classification Date Reference Sequences Attachments

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